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=> s 146-14-5/rn or 146-17-8/rn or 752-56-7/rn or 6155-39-1/rn or 13345-95-4/rn
          6005 146-14-5
           142 146-14-5D
          5884 146-14-5/RN
                 (146-14-5 (NOTL) 146-14-5D )
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          3426 146-17-8
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          3334 146-17-8/RN
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           242 752-56-7
             1 752-56-7D
           241 752-56-7/RN
                 (752-56-7 (NOTL) 752-56-7D )
             3 6155-39-1
             0 6155-39-1D
             3 6155-39-1/RN
                 (6155-39-1 (NOTL) 6155-39-1D )
            66 13345-95-4
             2 13345-95-4D
            64 13345-95-4/RN
                 (13345-95-4 (NOTL) 13345-95-4D )
L14       8253 146-14-5/RN OR 146-17-8/RN OR 752-56-7/RN OR 6155-39-1/RN OR
               13345-95-4/RN

=> s l4 and (hypercytokinemia or lymphokine or cytokine)
         18618 L4
            65 HYPERCYTOKINEMIA
         11555 LYMPHOKINE
         91836 CYTOKINE
L15          7 L4 AND (HYPERCYTOKINEMIA OR LYMPHOKINE OR CYTOKINE)

=> s l14 and (hypercytokinemia or lymphokine or cytokine)
            65 HYPERCYTOKINEMIA
         11555 LYMPHOKINE
         91836 CYTOKINE
L16         11 L14 AND (HYPERCYTOKINEMIA OR LYMPHOKINE OR CYTOKINE)

=> d 1-11 bib abs

L16  ANSWER 1 OF 11  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:1054462  CAPLUS
DN   142:28174
TI   Pharmaceutical compositions containing riboflavins and ubidecarenones,
     preparations separately containing two components, use of them as
     cytokine production inhibitors, and the inhibitors
IN   Kodama, Kotaro; Araki, Seiichi; Toyosawa, Itsuo; Suzuki, Mamoru; Kimata,
     Motoki; Tsujimoto, Michihiko
PA   Eisai Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 14 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
     --------------      ----   --------    --------------------    --------
PI   JP 2004345988        A2    20041209    JP 2003-143179          20030521
PRAI JP 2003-143179               20030521
AB   Compns. containing ≥1 selected from riboflavin, its derivs., or their
     pharmacol. acceptable salts and ≥1 selected from ubidecarenone, its
     derivs., and their pharmacol. acceptable salts are useful for treatment of
     hypercytokinemia in Alzheimer disease, rheumatoid arthritis, gout,
     septicemia, etc., and chronic inflammatory diseases such as dermatitis,
     mastitis, etc., alleviation of phys. fatigue, and activation of energy
     production.  Thus, simultaneous addition of 5'-FMN-Na and CoQ10 to mouse
     peritoneal macrophage significantly inhibited LPS-induced IL-6 production

L16  ANSWER 2 OF 11  CAPLUS  COPYRIGHT 2006 ACS on STN
AN   2004:633950  CAPLUS
DN   141:169975
TI   Purification, cloning and characterization of L-amino acid oxidase with
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cytotoxic activity from Aplysia punctata and use for the diagnosis and treatment of cancer
IN Butzke, Daniel; Goedert, Sigrid; Dittrich, Michael; Rudel, Thomas; Meyer, Thomas F.
PA Max-Planck-Gesellschaft Zur Foerderung Der Wissenschaften E.V., Germany
SO PCT Int. Appl., 125 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004065415	A2	20040805	WO 2004-EP423	20040120
	WO 2004065415	A3	20050120		
	W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI				
	EP 1585761	A2	20051019	EP 2004-703388	20040120
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRAI	EP 2003-1232	A	20030120		
	EP 2003-26613	A	20031119		
	WO 2004-EP423	W	20040120		

AB The present invention relates to a cytotoxic polypeptide which is an L-amino acid oxidase isolated from the ink of the sea hare Aplysia punctata via anion exchange chromatog. and gel filtration. The polypeptide is termed APIT (Aplysia punctata ink toxin). Tumor cells treated with APIT displays a morphol. which is neither typical for apoptosis nor for necrosis but rather is typical for oxidative damage induced cell death. The cDNA sequence and the encoded amino acid sequence of APIT isoforms are provided. The toxic and enzymic activity of APIT is due to the presence of an attached FAD. It was demonstrated that the cytotoxic activity depended on the H2O2 producing enzymic activity of APIT. From all amino acids tested only L-lysine and L-arginine served as substrates for APIT to produce hydrogen peroxide. Sensitivity of different tumor cell lines to APIT induced cell death was studied. Change in protein expression pattern in Jurkat T cells after treatment with APIT was investigated. The influence of APIT on the gene exression of tumor cells was investigated by Microarray technol. It was shown that healthy human cells are resistant against the APIT-induced cell death. APIT can be used for the manufacture of a medicament for the diagnosis and treatment of cancer.

L16 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:818294 CAPLUS
DN 139:297048
TI Drugs containing riboflavin compound
IN Araki, Seiichi; Suzuki, Mamoru; Kodama, Kohtarou; Toyosawa, Toshio
PA Eisai Co., Ltd., Japan
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003084545	A1	20031016	WO 2003-JP4511	20030409
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,				

PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

	AU 2003227475	A1	20031020	AU 2003-227475	20030409
PRAI	JP 2002-106685	A	20020409		
	WO 2003-JP4511	W	20030409		

AB Disclosed is a drug composition comprising at least one member selected from among riboflavin, a riboflavin derivative and a pharmacol. acceptable salt thereof, at least one member selected from among protein C, an activated protein C and derivs. of these, and/or valine as active ingredients and/or an immune activator or protective remedy of enhanced efficacy. An i.v. injection of Na riboflavin phosphate at 10 mg/kg and activated protein C 75 units/kg to endotoxin-induced shock model mice significantly increased the survival rate.

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:737589 CAPLUS
DN 139:255348
TI Drugs containing riboflavin-type compounds
IN Araki, Seiichi; Suzuki, Mamoru; Kodama, Kohtarou; Toyosawa, Toshio
PA Eisai Co., Ltd., Japan
SO PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003075935	A1	20030918	WO 2003-JP2868	20030311
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003211586	A1	20030922	AU 2003-211586	20030311
	EP 1484061	A1	20041208	EP 2003-744055	20030311
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 2005208124	A1	20050922	US 2005-506631	20050411
PRAI	JP 2002-65720	A	20020311		
	WO 2003-JP2868	W	20030311		

AB It is intended to provide drugs that contain as the active ingredient at least one member selected from among riboflavin, riboflavin derivs. and pharmacol. acceptable salts thereof and have an effect of inhibiting a **cytokine** such as IL-1β, IL-6, IL-10, INF-γ, TNF-α, GM-CSF, IL-8 or MCP-1; and preventives or remedies that have an excellent **cytokine** inhibitory effect for inflammatory diseases accompanied by **hypercytokinemia.**

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1995:684112 CAPLUS
DN 123:252728
TI Further characterization and comparison of inducible nitric oxide synthase

in mouse, rat, and human hepatocytes
AU Nussler, Andreas K.; Silvio, Mauricio Di; Liu, Zhi-Ze; Geller, David A.; Freeswick, Paul; Dorko, Kenneth; Bartoli, Fabio; Billiar, Timothy R.
CS Department Surgery, University Pittsburgh, Pittsburgh, PA, USA
SO Hepatology (Philadelphia) (1995), 21(6), 1552-60
CODEN: HPTLD9; ISSN: 0270-9139
PB Saunders
DT Journal
LA English
AB Marked differences in induced nitric oxide (NO) synthesis occur between species. The authors have previously shown that both human and rat hepatocytes express an inducible NO synthase in response to cytokines and lipopolysaccharide. In this study, the authors compare the expression and regulation of **cytokine**-induced NO synthase in hepatocytes isolated from three species, human, rat, and mouse. On stimulation with tumor necrosis factor alpha (TNFα), interleukin-1β (IL-1β), interferon gamma (IFNγ), and lipopolysaccharide (LPS), it was found that hepatocytes from all three species produce high levels of NO with levels of production exhibiting the following hierarchy: rat hepatocytes > mouse hepatocytes > human hepatocytes. Whereas rat and mouse hepatocytes express inducible NO synthase mRNA in response to TNFα, IL-1β, or IFNγ as a single stimulus, human hepatocytes respond to LPS alone. Inhibition of NO generation through transforming growth factor (TGF-β1) was seen in mouse (77%) and rat hepatocytes (17%) whereas only about 10% was seen in human hepatocytes. Epidermal growth factor (EGF) was shown to inhibit NO synthesis in human and mouse hepatocytes but not rat. A marked NO-dependent inhibition of total protein synthesis was seen in rat and human hepatocytes, whereas mouse hepatocytes showed almost no inhibition in protein synthesis when stimulated. NO-dependent cGMP release was found in all three species. Comparative studies on cytosol for inducible NO synthase enzyme activity showed that mouse and rat hepatocyte cytosol needed only L-arginine and reduced form of nicotinamide-adenine dinucleotide phosphate (NADPH) to exhibit NO formation, whereas cytosol from human hepatocytes required the addition of 5,6,7,8-tetrahydrobiopterin, FMN, and FAD to exhibit maximal NO synthase activity. The results show even though hepatocytes from all three species can express considerable inducible NO synthase activity, important differences exist in the characteristics and effects of the NO synthesis.

L16 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1995:133502 CAPLUS
DN 122:49741
TI Cloning and functional expression of human inducible nitric oxide synthase (NOS) cDNA from a glioblastoma cell line A-172
AU Hokari, Atsushi; Zeniya, Mikio; Esumi, Hiroyasu
CS Biochemistry Division, National Cancer Center Research Inst., Tokyo, 104, Japan
SO Journal of Biochemistry (Tokyo, Japan) (1994), 116(3), 575-81
CODEN: JOBIAO; ISSN: 0021-924X
DT Journal
LA English
AB Nitric oxide (NO) is a messenger mol. with diverse functions throughout the body. The inducible type of nitric oxide synthase (NOS) is considered to be a key mol. in the immune responses to bacteria, parasites, and tumors, and its gene expression is regulated by cytokines. The authors isolated 3 overlapping partial inducible NOS cDNA clones from a human glioblastoma cell line A-172 induced by IL-1, TNF-α, and IFN-γ. The 3,963-bp human glioblastoma inducible NOS-cDNA contained the longest open reading frame of 3,450 bp, which encoded a polypeptide of 1,153 amino acids with a calculated mol. mass of 131 kDa. This human inducible NOS possessed consensus recognition sites for the cofactors FMN, FAD, and NADPH and calmodulin recognition sites, and displayed 48.1% sequence identity with the endothelial type, 43.1% with the neuronal type, an 99.3% with the inducible type from hepatocytes, and 99.9% with the

inducible type from chondrocytes and adenocarcinoma. An expression plasmid consisting of pSG5 expression vector and cDNA containing the entire putative encoding sequence was constructed and transfected into COS-1 cells. COS-1 cells showed nitric oxide synthase activity together with a 130 kDa immunoreactive band on Western blot anal.

L16 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1994:549114 CAPLUS
DN 121:149114
TI Method for using polynucleotides, oligonucleotides, and derivatives thereof to treat various disease states
IN Burcoglu, Arsinur
PA USA
SO PCT Int. Appl., 102 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9415621	A1	19940721	WO 1994-US638	19940113
	W: AU, CA, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2153778	AA	19940721	CA 1994-2153778	19940113
	CA 2153778	C	20040706		
	AU 9460904	A1	19940815	AU 1994-60904	19940113
	AU 692433	B2	19980611		
	EP 678029	A1	19951025	EP 1994-907246	19940113
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	US 2003013669	A1	20030116	US 2001-754066	20010105
	US 6699985	B2	20040302		
	US 2004138167	A1	20040715	US 2004-768089	20040202
PRAI	US 1993-2395	A2	19930113		
	US 1991-748277	B2	19910821		
	US 1991-815130	B2	19911227		
	US 1992-830886	B2	19920204		
	WO 1994-US638	W	19940113		
	US 1994-185416	A2	19940124		
	US 1997-848013	B1	19970428		
	US 2001-754066	A3	20010105		

AB Oligodeoxyribonucleotides, polydeoxyribonucleotides, and derivs. thereof, e.g. defibrotide, are agents of genetic modulation at the levels of transcription, translation, secondary messengers, and cellular signal transduction systems. Various disease states can be treated by modifying the dose of such agents in response to observed fluctuations (e.g., increase, decrease, appearance, disappearance) in normal, disease and repair markers. The specificity of defibrotide for HIV virus in HIV-infected peripheral blood mononuclear cells was evaluated. Treatment of HIV-infected patients, as well as of patients with other diseases, is described.

L16 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1993:554557 CAPLUS
DN 119:154557
TI Macrophage nitric oxide synthase subunits. Purification, characterization, and role of prosthetic groups and substrate in regulating their association into a dimeric enzyme
AU Baek, Kwang Jin; Thiel, Bonnie A.; Lucas, Shawn; Stuehr, Dennis J.
CS Dep. Immunol., Cleveland Clin., Cleveland, OH, 44195, USA
SO Journal of Biological Chemistry (1993), 268(28), 21120-9
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English
AB The **cytokine**-induced nitric oxide synthase (NOS) of macrophages is a homodimeric enzyme that contains iron protoporphyrin IX (heme), FAD,

FMN, tetrahydrobiopterin, and calmodulin. To investigate how the enzyme's quaternary structure relates to its catalytic activity and binding of prosthetic groups, dimeric NOS and its subunits were purified sep. and their composition and catalytic properties compared. In contrast to dimeric NOS, purified subunits did not synthesize NO or contain bound heme or tetrahydrobiopterin. However, the subunits did contain FAD, FMN, and calmodulin in amts. comparable with dimeric NOS, displayed the light absorbance spectrum of an FAD- and FMN-containing flavoprotein, and generated an air-stable flavin semiquinone radical upon reduction of their ferricyanide-oxidized form. Dimeric NOS and NOS subunits were equivalent in catalyzing electron transfer from NADPH to cytochrome c, dichlorophenolindophenol, or ferricyanide at rates that were 8-30-fold faster than the maximal rate of NO synthesis by dimeric NOS. Reconstitution of subunit NO synthesis required their incubation with L-arginine, tetrahydrobiopterin, and stoichiometric amts. of heme and correlated with formation of a proportional amount of dimeric NOS in all cases. The dimeric NOS reconstituted from its subunits contained 0.9 heme and 0.44 tetrahydrobiopterin bound per subunit and had the spectral and catalytic properties of native dimeric NOS. Thus, NOS subunits are NADPH-dependent reductases that acquire the capacity to synthesize NO only through their dimerization and binding of heme and tetrahydrobiopterin. The ability of heme, tetrahydrobiopterin, and L-arginine to promote subunit dimerization is unprecedented and suggests novel roles for these mols. in forming and stabilizing the active dimeric NOS.

L16 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1993:228720 CAPLUS
DN 118:228720
TI The **cytokine**-induced macrophage nitric oxide synthase is a flavoprotein containing flavin adenine dinucleotide and flavin mononucleotide
AU Stuehr, D. J.; Cho, H. J.; Kwon, N. S.; Nathan, C. F.
CS Cleveland Clin., Cleveland, OH, 44195, USA
SO Biol. Nitric Oxide, Proc. Int. Meet., 2nd (1992), Meeting Date 1991, Volume 2, 1-3. Editor(s): Moncada, Salvador. Publisher: Portland Press, London, UK.
CODEN: 59AFA7
DT Conference; General Review
LA English
AB A review with 13 refs. on evidence indicating that **cytokine** -induced macrophage nitric oxide synthase is a flavoprotein containing FAD and FMN. Some implications of this with regard to the enzyme reaction mechanism are discussed.

L16 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1992:166702 CAPLUS
DN 116:166702
TI Human fat cells possess a plasma membrane-bound hydrogen peroxide generating system that is activated by insulin via a mechanism bypassing the receptor kinase
AU Krieger-Brauer, Heidemarie I.; Kather, Horst
CS Klin. Inst. Herzinfarktforsch., Med. Universitaetsklin., Heidelberg, D-6900, Germany
SO Journal of Clinical Investigation (1992), 89(3), 1006-13
CODEN: JCINAO; ISSN: 0021-9738
DT Journal
LA English
AB Insulin caused a transient increase in H_2O_2 accumulation in human fat cell suspensions that was observed only in the presence of an inhibitor of catalase and heme-containing peroxidases, such as azide, and reached peak levels of 30 μM within 5 min. The cells contained a plasma membrane-bound NADPH oxidase, producing 1 mol H_2O_2/mol of NADPH oxidation, that was activated on exposure of intact cells to insulin at concns. that are physiol. relevant (0.1-10 nM). The hormone effect was rapid and was due to a selective increase in substrate affinity. The enzyme was

magnesium dependent, required a flavin nucleotide for optimal activity, and was most active at pH 5.0-6.5. In contrast to all other hormone- or **cytokine**-sensitive NADPH oxidases that have been characterized in sufficient detail, the human fat cell oxidase retained its hormone responsiveness after cell disruption, and only Mn2+, but no ATP, was required for a ligand-induced activation in crude plasma membranes. The results demonstrate that insulin utilizes tyrosine kinase-independent pathways for receptor signaling and strongly support the view that H2O2 contributes to the intracellular propagation of the insulin signal.

L16 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1991:577948 CAPLUS
DN 115:177948
TI Purification and characterization of the **cytokine**-induced macrophage nitric oxide synthase: an FAD- and FMN-containing flavoprotein
AU Stuehr, Dennis J.; Cho, Hearn J.; Kwon, Nyoun Soo; Weise, Mary F.; Nathan, Carl F.
CS Med. Coll., Cornell Univ., New York, NY, 10021, USA
SO Proceedings of the National Academy of Sciences of the United States of America (1991), 88(17), 7773-7
CODEN: PNASA6; ISSN: 0027-8424
DT Journal
LA English
AB A soluble nitric oxide (NO) synthase activity was purified 426-fold from a mouse macrophage cell line activated with interferon γ and bacterial lipopolysaccharide by sequential anion-exchange, affinity, and gel filtration chromatog. SDS/PAGE of the purified NO synthase gave three closely spaced silver-staining protein bands between 125 and 135 kDa. When assayed in the presence of L-arginine, NADPH, tetrahydrobiopterin, FAD, and reduced thiol, purified NO synthase had a specific activity of 1313 nmol of NO2- plus NO3- per min per mg. The apparent Km of the enzyme for L-arginine and NADPH was 2.8 and 0.3 μM, resp. Addition of calcium ions with or without calmodulin did not increase the activity of the purified enzyme, and NO synthesis was not altered by calmodulin inhibitors. Gel filtration chromatog. indicated that the induced NO synthase was catalytically competent as a dimer of ≈250 kDa but could be dissociated into inactive monomers of ≈130 kDa in the absence of L-arginine, FAD, and tetrahydrobiopterin. Upon heat denaturation, NO synthase released 1.1 mol of FAD and 0.55 mol of FMN per mol of 130-kDa subunit. Thus, inducible macrophage NO synthase differs in several respects from constitutive NO synthases and is one of very few eukaryotic enzymes containing both FAD and FMN.

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-8.25	-13.50

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